Author: Natalie VanTyne at FOXTROT15

Date: 10/27/97 3:13 PM

Priority: Normal

TO: Ted Hopkins at Hotel17 CC: Mark Hickman at Hotel17 CC: Kathy Zbryk at Golf16

Subject: Glovebox 460 in Building 779 under RCRA Unit 881.3B

If the combination of terms in the title sounds like an illegitima

If the combination of terms in the title sounds like an illegitimate child, it is. I will try to convey the same information that I gave Kathy Zbryk on Friday when she paged me about it.

It all started when Richard Bloom (SSOC Environmental Management under Bill Wierzbicki) discovered vessels that were suspected to contain uranium hydride located in Building 779 in GB 460. Uranium hydride is reactive, hence the D003 designation. The way to deal with this material was to expose the uranium hydride to a controlled amount of air within the glovebox, and the hydrogen would combine with oxygen in the air to form water, which is a hydrolysis type of reaction. It would not seem like a treatability study would take care of this problem, since there is no new technology here. Causing this chemical reaction was determined to be treatment of a RCRA waste, as Richard came to agreement with Randy Leitner and Chris Gilbreath.

Now we have RCRA treatment to stabilize an unstable material (or at least considered such) but apparently no unit in which to conduct it. However, there is a unit in which a hydrolysis treatment can be done, and the same unit can also treat wastes in their own locations rather than carting them to where the unit boundaries are. That is Unit 881.3B, located in 881. The major problem arose when the uranium hydride could not be brought to 881 because that building's authorization basis would not allow it. That is how the treatment came to be conducted in 779 in an un-permitted glovebox.

It was decided among Randy and Chris to allow treatment of just this batch of 15 vessels suspected of containing uranium hydride in their present location, and to publish a Closure Description Document up front explaining how the glovebox would be closed from RCRA following the treatment. You received a copy of the CDD with the 45-day notification. A permit modification to add this glovebox to the RCRA Permit was not considered necessary, since the treatment was a one-shot deal and in-situ treatment of a Unit 881.3B process is already allowed by the Permit.

To answer your question about LDR compliance, the exiting waste form is non-hazardous because its only characteristic, reactivity, is removed by the treatment. Therefore, I doubt that LDR is an issue. Correct me if I am wrong in this assertion.

What no one considered, apparently, was the impact of conducting this treatment, which took place during the week of September 15, on the Building 779 DOP or on the schedule for the decommissioning of 779. The assumption made in the decision to go ahead with this was that impact on either would be minimal to none. Please let me know what any other significant ramifications will be, as well as whether or when you need more information. This closure is expected to be very straightforward, and we will conduct it in accordance with all applicable anything. At present, we could start and finish it during the week of December 15 or

later.

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